

Title (en)
BATTERY CHARGING SYSTEM AND BATTERY CHARGING METHOD

Title (de)
BATTERIELADESYSTEM UND BATTERIELADEVERFAHREN

Title (fr)
SYSTÈME ET PROCÉDÉ DE CHARGE DE BATTERIE

Publication
EP 3842283 A4 20211103 (EN)

Application
EP 19910649 A 20191217

Priority
• KR 20190005245 A 20190115
• KR 2019017908 W 20191217

Abstract (en)
[origin: EP3842283A1] A battery charging system, wherein a first battery pack includes: a first battery that is charged in a non-contact connection; a second battery pack includes a second battery that is charged in a non-contact connection, a first capacitor connected in series between positive and negative poles of the second battery, and a first BMS configured to measure a voltage of the second battery and voltages of both ends the second capacitor; and the first BMS charges the second battery with the voltage of the first battery when the first battery voltage is higher than the second battery voltage, and charges the first battery with the voltage of the second battery when the first battery voltage is lower than the second battery voltage.

IPC 8 full level
B60L 53/122 (2019.01); **B60L 53/34** (2019.01); **B60L 58/18** (2019.01)

CPC (source: EP KR US)
B60L 53/12 (2019.02 - KR US); **B60L 53/122** (2019.02 - EP); **B60L 53/34** (2019.02 - EP); **B60L 58/10** (2019.02 - US); **B60L 58/18** (2019.02 - EP KR); **B60L 58/22** (2019.02 - US); **H02J 7/00045** (2020.01 - US); **H02J 7/0019** (2013.01 - US); **H02J 7/0047** (2013.01 - US); **H02J 50/10** (2016.02 - US); **B60L 2240/547** (2013.01 - KR); **B60L 2270/40** (2013.01 - EP); **B60Y 2200/91** (2013.01 - KR); **Y02T 10/70** (2013.01 - EP KR); **Y02T 10/7072** (2013.01 - EP KR); **Y02T 90/12** (2013.01 - EP KR); **Y02T 90/14** (2013.01 - EP)

Citation (search report)
• [A] EP 2062801 A1 20090527 - DENSO CORP [JP]
• [A] US 2015321578 A1 20151112 - GORKA MATTHIAS [DE], et al
• [A] EP 1112896 A1 20010704 - RENAULT [FR]
• See also references of WO 2020149537A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3842283 A1 20210630; **EP 3842283 A4 20211103**; CN 112770932 A 20210507; CN 112770932 B 20240426; JP 2021536213 A 20211223; JP 7199631 B2 20230106; KR 20200088663 A 20200723; US 11981219 B2 20240514; US 2022001755 A1 20220106; WO 2020149537 A1 20200723

DOCDB simple family (application)
EP 19910649 A 20191217; CN 201980064022 A 20191217; JP 2021512553 A 20191217; KR 20190005245 A 20190115; KR 2019017908 W 20191217; US 201917280578 A 20191217